

193044 6505 et s. 1 'e Nos 1066, 1120 Nound Nos 1490, 1-91, 6 Decpubat 1879

Shite Sands Retearelegical Test



ATMOSPHERIC SCIENCES LABORATORY WHITE SANDS MISSILE RANGE, NEW MEXICO

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SECURITY CLASSIFICATION OF THIS PAGE (When Date Entered) READ INSTRUCTIONS BEFORE COMPLETING FORM REPORT DOCUMENTATION PAGE I. REPORT NUMBER DR 1097 19304B GSRS 1 Missile Numbers 1069 1123 6 December 1979. 6. PERFORMING ORG. REPORT NUMBER Round Numbers V-90, W-91. · AUTHOR(a) 8. CONTRACT OR GRANT NUMBER DA Tosk/1F665702D127 White Sands Meteorological Team 10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS Neteorological data rept 1. CONTROLLING OFF OF NAME AND ADDRESS US Army Electronics Research & Development Cmd 12. REPORT DATE Dec Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002 4. MONITORING AGENCY NAME & ADDRESS(II different from Controlling Office) 15. SECURITY CLASS. (of this report) US Army Electronics Research & Development Cmd UNCLASSIFIED

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SCHEDULE Adelphi, MD 20783 16. DISTRIBUTION STATEMENT (of this Report) 17. DISTRIBUTION STATEMENT (of the obstract entered in Back 20, if different from Report) Approved for public release; distribution unlimited. 18. SUPPLEMENTARY NOTES 19. KEY WORDS (Continue on reverse side if necessary and identify by block number) ABSTRACT (Continue on reverse ofth H necessary and identify by block number) Meteorological data gathered for the launching of the 19304B GSRS, Missile Numbers 1069, 1123, Round Numbers V-90 and V-91 are presented in tabular form.

DD , FORM 1473

UNCLASSIFIED SECURITY CLASSIFICATION OF THIS PAGE (When Date Entered)

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#### INTRODUCTION

19364B GSRS , Missile Numbers 1069 and 1123 , Round Numbers V-90
and V-91, were launched from LC-33, White Sands Missile Range (WSMR),
New Mexico, at 1434 and 1434:05 MST, 06 December 1979. The scheduled launch
times were 1430 and 1430:04 MST.
DISCUSSION
Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:
1. Observations
a. Surface
(1) Standard surface observations to include pressure, temperature ( $^{\circ}$ C), relative humidity, dew point ( $^{\circ}$ C), density (gm/m <sup>3</sup> ), wind direction and speed, and cloud cover were made at the <u>LC-33</u> Met Site at T-0 minutes.
(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.
b. Upper Air
(1) Low level wind data were obtained from RAPTS T-9 pibal observation at:
SITE AND ALTITUDE
LC-33 2Km NICK 2Km
(2) Air structure data (rawinsonde) were collected at the following Met Sites. Data were collected from surface to 78,000 feet in 500-feet increments.
SITE AND TIME WSD 1445 MST
WSD 1445 MST
Ale Carine
D. Avzz. Text.
Part of the state



	Y186,500		POL	E 3			,						
Ø	Y186,000	-	POL			L-51	9					 	
MET TOWER				L-5									
	Y185,500												
		]				<u> </u>	RAI	PTS 1	-9				
X475,000	¥185,000	X485,500			000	000 <b>,</b> 004v		CKHOI	ISE	707	000,0044		000 1000

- 1. MET TOWER 4 Bendix Model T-20 Anemometers at 12 ft, 62 ft, 102 ft, and 202 ft with E/A recorders.
- 2. POLE ANEMOMETER Bendix Model T-120 with E/A recorders.
  - (a) Pole #1 38.7 ft.
  - (b) Pole #2 -.53.0 ft.
  - (c) Pole #3 83.6 ft.
- 3. RAPTS T-9 Radar Automatic Pilot-Balloon Tracking System T-9 Radar.

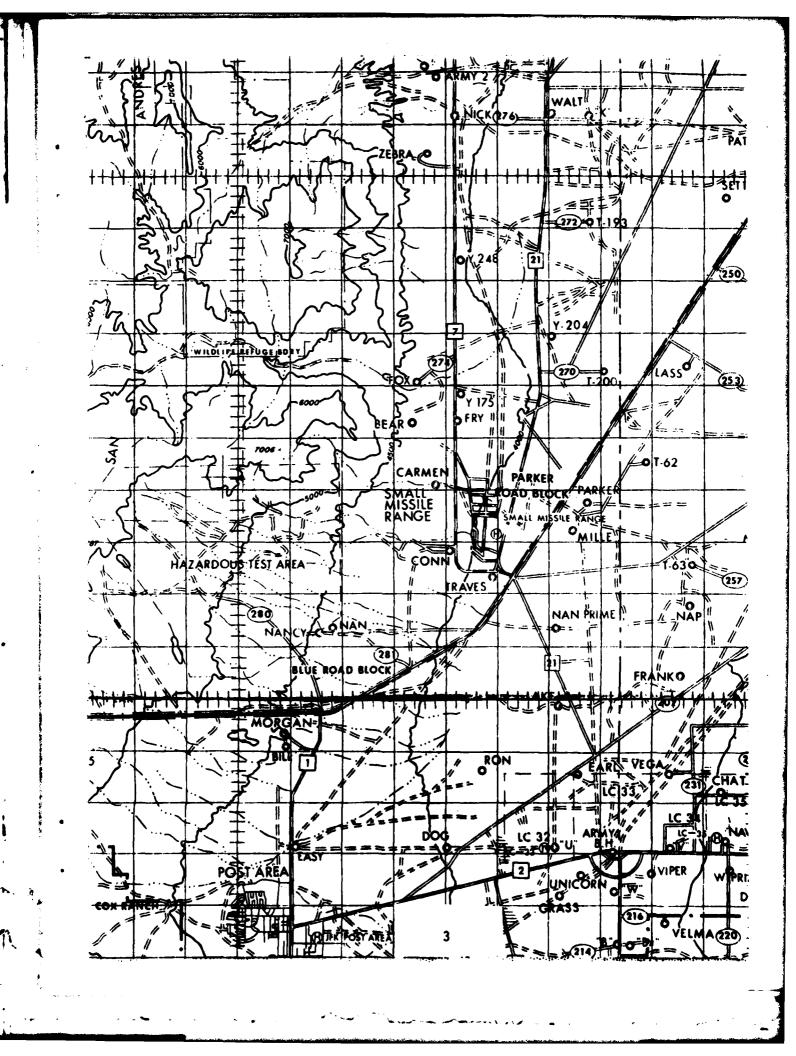


TABLE 1. Surface Observations taken at 1434 MST, 06 December 1979, at LC-33, 19304B GSRS, Missile Numbers 1069 and 1123, Round Numbers V-90 and V-91.

ELEVATION	3977.30	FT/MSL
PRESSURE	874.2	MBS
TEMPERATURE	14.7	o <sub>C</sub>
RELATIVE HUMIDITY	21	1.7 20
DEW POINT	7.2	OC
DENSITY	1054	GM/M <sup>3</sup>
WIND SPEED	05	ктѕ
WIND DIRECTION	157	DEGREES
CLOUD COVER	4	Ci

т	٨	D	1	•

POLE #1 X485,87 Y185,95 H4018.7 38.7 ft	8.90 4		POLE #2 X485,874 Y186,012 H4033.53 53.0 ft	4.93 2.00 7		POLE # X485,87 Y186,110 H4063.9 83.6 ft	7.29 6.06 2	
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DI R DE G	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	151	03	-30	143	03	-30	129	02
-20	149	04	-20	126	03	23	130	02
-10	129	04	-10	136	02	-10	142	02
0.0	125	04	0.0	MISG	02	0.0	122	02
+10	114	04	+10	157	02	+10	116	03
			I					

TABLE	3	LC-33 METEOROLOGICA	L TOWER	ANEMOMETER	MEASURED WINDS	(202 FT TOWER)
		<del></del>				•

LEVEL #1, 1 X484,982.64		73, H3983.00 (base)	LEVEL #2, 62 X484.982.64		3, H3983.00 (base)
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	152	04	-30	MISG	06
-20	136	03	-20	MISG	07
-10	136	04	-10	MISG	05
0.0	153	04	0.0	MISG	04
+10	161	04	+10	MISG	04

LEVEL #3, 10 X484,982.64	2 FEET 1185,057.7	3, H3983.00 (base)	LEVEL #4, 20 X484,982, Y1	2 FEET 85,057.73, H	3983.00 (base)
T-TIME SEC	DIR DEG	SPEED KTS	T-TIME SEC	DIR DEG	SPEED KTS
-30	149	05	-30	161	05
-20	151	05	-20	162	04
-10	151	05	-10	156	04
0.0	155	04	0.0	157	04
+10	163	04	+10	157	04

#### PILOT BALLOON MEASURED WIND DATA

TABLE	4									
RELEASED	FROM LC-3	13		DATE	06 Decemb	er 1979			TIME 1434	MST
TRACKER	coo	RDINATE	S (W	ISTM) X=	486,037.2	<u>4</u> Y	=18	32,350.1	6 н= <b>397</b>	7.30
NOTE: W	IND DIRECTI	ONS ARE	REF	ERENCED T	O TRUE NORT	Н				
HEIGHTS	ARE METERS	AGLXX	OR	FEET AGL_	<b></b> '					
HEIGHT AGL	DIRECTION DEGREES	SPEED KTS		HEIGHT AGL	DIRECTION DEGREES	SPEED KTS		HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	157	05				ļ	] ]			
90	185	02	ļ			ļ				
150	MISG	MISG			<u> </u>					ļ.
210	174	02								
270	158	04	<u> </u>							
330	134	01								
390	145	06								
500	171	02	]				] [			
650	280	04								
800	272	07	}				] [			
950	268	10								
1150	270	13				<u> </u>	] [			
1350	290	18								
1550	308	25					] [			
1750	308	27								
2000	309	26								
							] [			
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### PILOT BALLOON MEASURED WIND DATA

TABLE	<u>5</u>									
RELEASED	FROM NICK	·		DATE	06 Decembe	r 1979			TIME 1434	MST
TRACKER	C00	RDINATE	s (W	STM) X=	470,734.56	<u> </u>	= 2	55,775.64	4 H= 412	6.57
NOTE: W	IND DIRECTI	ONS ARE	REF	ERENCED T	O TRUE NORTH	1				
HEIGHTS A	ARE METERS	AGL_XX	OR	FEET AGL_	·•					
	DIRECTION DEGREES	SPEED KTS		HEIGHT AGL	DIRECTION DEGREES	SPEED KTS		HEIGHT AGL	DIRECTION DEGREES	SPEED KTS
SFC	CALM	CALM								
90	096	02								
150	096	03								
210	094	03	]							
270	081	02	}							
330	341	01	}							
390	285	01								
500	224	02								
650	255	06								
800	273	09								
950	296	10								
1150	305	19								
1350	308	21	]							}
1550	314	19								
1750	319	19								
2000	317	19								
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		<del> </del>	1	<b></b>						
}	<del> </del>	<del> </del>	1	<b>}</b> -			1	<b> </b>		

STATION ALTITUDE 3989.00 FEET MSL 6 DEC- 79 1445 HKS MST ASCENSION NO. 507

SIGNIFICANT LEVEL DATA 3400020507 WHITE SANDS

GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON DEG

# TABLE 6

PRESSURE		TEMPE	EMPERATURE R DEMEDIAL	REL . HUM
MILLIBARS	รั้ง	Š	CENTIGRADE	
B74.4	3089.0	14.0	7.6-	25.0
3/1.4	4084.2	14.9	•	19.0
0.068	4771.0	12.4	-10.5	
762.0	1734.6	† <b>•</b> †	-13.9	
742.6	8423.7	4•1	-14.0	24.0
733.0	8772.7	6.5	7.41-	21.0
730.0	0013.	6.2	-14.5	•
a•±09	13903.8	•	-17.1	22.0
٠	5n46.	•	-21.1	22.0
5555	6232.	₽.S.		14.6
5000		-10.0	-31.5	16.0
ċ	•	-24.5	サ・パカー	17.0
<b>.</b>	•	-34.7	-50.5	14.0
00.00	-	å		
e.	34723.8	ň		
239·B		ŝ		
Ŧ,	•	å		
Ş	•	•		
2.55	_	-55.0		
Ņ	_	-57.4		
	_	•		
150.0	-	•		
<b>.</b>	_	-60.5		
ţ,	_	-61.4		
ŧ		-66.5		
0.0	_	-64.7		
93.4	•	-63.8		
84.4	•	<b>-67.4</b>		
	•	-65.7		
	•	6-19-		
0.00	•	-63.3		
វា• វាវា	0151.	1-64-1		
74.46	5398.	-57.4		
30·0	78272.0	-55.4		

SIAT

UPPER AIR DATA

SEODETIC COONDINATES 32.40043 LAT CEG 106.37033 LON CEG	I VI	DIRECTION SPEED OF OF SPEERSTION KNOTS REFRACTION	1.	0.	201	2.9 1.0002	EC0001 1 0000		5.7	7-1	5.7 1. 7.1 1. 9.8 1.	7.7. 1. 1. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	5.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4	25.44 20.45	20 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	20 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	20 20 20 20 20 20 20 20 20 20 20 20 20 2	2000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2000 2000 2000 2000 2000 2000 2000 200	2000 2000 2000 2000 2000 2000 2000 200	6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1	20000000000000000000000000000000000000			20000000000000000000000000000000000000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1				2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 - 2 -		
~ v)	ĸ	SOUND DI KNCTS DEG	660.7	8.0 <sub>0</sub> 0	6.649	0.859	4.009	6.400	6,3,3	651.7	650.1	2.640	9.649	651.8	651.6	651.5	650.6	9.649	648.7	647.7	640.8	9.549	6.410	642.9	542.7	5ª1.5	9.0,49	639.R	6,8¢0	0.7.0	635.5	633.9	632.4	50°C	629.3	_	2.9%	_		021.6	650.0
3400020507 WHITE SANUS TABLE 7		GW/CUBIC METER	1059.0	1058.2	1042.3	•	1015.3	0	988•0		961.5	4.5.46	927.7	•	#• 288	872.4	858.5	845.1	851.8	810.7	805-8	793.1	780.6	768.4	7.0.7	745.2	733.0	_	_	_	689.5	679.3	9.609	559.6	-	659.5	629.8		•	10	592.3
	REL.HUM.	PERCENT	25.0	24.3	19.0	19.5	20.5	21.5	22.5	23.5	24.5	24.0	23•3	21.0	21.0	21.0	21.1	21.3	•	•	•	•	•	•	•	22.0	_	20.01	V .	G • 1	17.0	n L	n,	n•91		œ,	•	16.4	16.5	16.6	16.7
T ASL	TENPERATURE	UEWPOINT CENTIBRADE	-5.7	0.y-	<b>∠•</b> 6−	-10.8	-11.2	-11.6	-12.3	-12.9	÷	-14.2	÷	:	1, 41.	÷	-15.0	-15.6	-16.2	-16.8	-17.4	-18.0	-18.6	-10.3	-20-1	-21.0	-23.3	0.02	0 0 0 0 0 0	0.00	5.62	1000-	5.00-	3.15.	-32·B	-33.8	3 · a ·	-35.8	-35.8	-37.€	a•35-
1949.10 FERT B LLES HKS MST	- 5	AIP DEGREES (	14.0	1401	13.4	11.8	10.4	9.1	7.1	<b>†•</b> 9	S•0	•	ი. •	**	Ö•5	٠٠ و•۶	<b>ង</b> ហ	<b>4</b> •0	<b>5•</b> 8	3.0	2.5	1•4	•	2.	-1.2	2.5				1 0	7.1	n :	0:	-11.0	-12.5	-13.6	2 · · · ·	-15.1	-17.4	-10.6	-19.9
36c 1 70	PRESSURE	MILLIBANS	574.4	1.478	928.4	842.5	827.5	812.3	C-161	182.4	166.6	754.5	C+0+/	720.8	713.5	100.3	687.3	674.5	962.4	9.649	637.6	455.	014.0	\$05.0	2-166	0.080	2000	70000	3 4 4		0.070	5070		*****	000	• • • • • • • • • • • • • • • • • • • •	7./64	42/04	€ 50.0	434.5	430.
STATION ALTITUDE 6 JEC+ 79 ASCENSION NO+ 5	GECHE IKIC	ACTITODE	3.489.0	4003.0	4500.0	5000	5590.0	ۥ000a	0.0359	7000-0	7500.0	3000	0.000 0.000	Ý-0006	3.00S6	10000.0		11000.0	1500.	12609-0	12500.6	13000-0	13500.0	3.000.41	V. DOC 1	2.0000T	14.00001		17610-6	7.000.4			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	3-00(6T	0.000	0.00000	0.00502	C100017	Z1500.0	22000.1	22500.0

ET VSL MST	
E 3989.00 FEET 4SL 1445 H4S MST	
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GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON DEG	INDEX OF HEFRACTION		1.000.1		-	1.00012	-	1.00011	Ä	ä	Ä	-	1.000108	<b>:</b>	<b>-</b>	_		~	<b>-</b>	<b>~</b>	1.00009	-		-	-	1.00008	-	<b>→</b>	<b>~</b> ·	┥,	1.00007	1.000075	<b>:</b>	1.00007	_	1.0000	5 1.000067		1.00006	_	_
6600E)	SPEED KNOTS	12.	•	10.01	1	11.9	12.	13.6	14.4	15.2	16.	17.0	18.	19.5	50.9	22.	2	24	25.7	27.0	28	53.		32.6	2	35	35.	36.2	9	٠,٠٠ د د د د د د د د د د د د د د د د د د د	200	60	1 1	42.5	43.	'n	<b>3</b>	ŝ	'n.	41.6	20,
	WIND DATA DIRECTION S	351.6	; <del>;</del>	18.0	51.4	35.1	34.6	95.6	55.9	30.5	27.8	0.47	19.4	15.4	12.3	11.3	10.5	7.6	₽• 5	# · ·	\$ 6 6		20 ·	10.1	70.	10.6	11.7	12.7	7.01	/ • • • •	6.01	16.2	201	7.7		18.9	ċ	20.3	-	24.0	2.5.0
7 S NNT)	SPEED OF SOUND MAINTS	616.9	515.4	613.7	612.0	610.3	0.809	6.000	605.2	66.3.5	001.7	6.00°	S.865	595°B	595.2	593.6	591.9	290.0	588.2	586.0	3° 4° 3°	582.5	5,000	578.7	570.9	575.5	574.5	574.5	574.1	V.070	0,570	573.6	573.1	0.70	574.8	575.1	574.6	574.1	573.6	573.1	7.4.7
3400020507 WHITE SANDS TABLE 7 (CONT	DENSITY S GMZCUBIC NETER			557.1	543.4	539.9	531.5	523.2	515.1	507.2	C.658	491.1	433.0	4.75.0	447.2	459.5	452.0	5-121	457.1	6.624	422.3	415.9	1.604	t • 26t	395.7	ત્ર• ભાગામાં ભાગામાં	389+5	371.6	0.000	0.000	5.0.0	338.8	7.660	322.8	3.4.0	306.3	549•6	293.1	246.6	4.082	270.0
	REL.HUM. PERCENT	16.9	16.9	17.0	17.2	17.3	17.5	17.6	17.7	17.9	18•0	15.2**	12.1**	9.0**	*5•	7.0**																									
7 45L MST	TEMPERATURE R DEWPOINT EES CENTIGRADE	6000 m	H . L .	14.00	6.64-	-45.0	1.674-	-47.2	ちゃいまし	5.64-	± 50.4	-53·0	-55.9	-54.5	-63.4	9•69-																									
89.00 FEET 4 1445 H-45 MST	TEMP AIR DEGREES	22.4	-23.7	-25.0	120.4	-27.1	た・かどー	-30.5	-31.9	-33.2	-34.6	-35.9	-37.2	4.86-	-39.1	-41.0	-42.5	9.64	74.50	1.00	1 · · · · · · · · · · · · · · · · · · ·	C-67-	-51.0	C.25.	-53.9	5.00 m	-55.7	ສ : ກຸດ ເຄີຍ : ກຸດ ເຄືອນ : ກຸດ : ກ : ກ : ກ : ກ : ກ : ກ : ກ : ກ : ກ : ກ	1000	2001		000		200	#*CC.	-50.5	-55.6	136.0	#+02-	-56.7	-57.1
TUÜE 39	PRESSURE	3	N. 60 th	7.960	384.6	280 ⋅	372.4	364.5	356.8	C+64C	342.0	34.5	327.2	220•U	J13.1	3000	2000	7.267	736.U	C•6/2	273.2	<b>4</b> 600.	7.097	Z2#•7	1.642	243.5	637.5	631.9	C+677	Y•172	4.CT7	210.0	0.000	0.7:52	1.00 to	101.6	19701	162.	178.4	74.5	1.00.1
STATTON ALTI- 6 DEC+ 79 ASCENSION NO	SEGMETHIC ALITUDE MSC FEET	23266.6	240000	24500.0	0.00052	25500.0	25000.0	20500.0	27000.0	27500.0	6.000cz	222cu+0	3.0006.5	27500.0	30000.0	30200	51000.0	51500.0	•	35300	•	0.500 0.000 0.000	C•03040	24500.0	25000	32500	3-000c	5-50500	0.00/C	0.0000	Cooler	38503	0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -	0.00060	0.0000	いっぱいのつき	0.0014	41500.0	47000.0	0.00524	6.00.00

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

3989.00 FELT MSL	1445 HRS YST	
STATTON ALTITUDE 3		ASCERS10H RO. 507

UPPER AIR DATA 3400020567 WHITE SANDS TABLE 7 (CONT)

GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON DEG

GEO.NE IKIC	PRESSURE	15.25 3.15.25	TEMPERATURE D. SERVINE	REL.HUM.	DENSITY	SPEED OF	MIND DATA	1A Sper	INDEX
MSL FEET	HILLIBAKS	DERKEES	CENTISHADE		74.TER	KNOTS KNOTS	UEGREES (TN)	KVOTS	REFRACTION
43500.0	165.0	-57.4			266.1	572.2	24.5	36.9	1.000060
3 • Dale + +	•	-57.4			261.8	572	52.6	35.7	1.000058
G-605+4	150.0	-57.5			255.7		18.4	35.8	
45000.0	154.5	-58.5			250.9	570.6	14.3	36.1	1.000056
45500.0	150.8	-59.8			246.2	569.1	10.3	36.6	1.000055
9-0009-	147.2	160.4			241.0	5.8.3	7.7	36.8	1.000054
45500.6	143.6	-60.5			235.4	568.0	G•0	36.7	
4700C+A	7.051	7.09-			559.9	56.7	5.5	36.6	1.000051
47509.0	130.0	6.09-			224.5		0.5	36.4	1.000050
481,30.0	133.5	-61.0			219.2	567	₽•\$	33.2	1.000049
44500 · O	130.3	-61.1			214.1		<b>⊅•</b> Ω	28.9	1 - 000048
4.3000.0	127.1	-61.2			203.0		12.5	54.6	1.000047
0.00S64	124.1	-61.4			2.94.1	9.996	18.2	20.5	1.000045
C+narine	12101	-62.2			199.9		15.2	19.0	1.000045
50500.0	118-1	-63.3			1 i 6 • 0		11.1	17.6	1.000044
21000-0	110.2	-64.3			192.2	-	<b>†•</b> 0	16.4	1.000043
31500.C	112.4	-65.4			185.4		2•5	15.2	1.000042
22000.6	1.661	-66.4			184.6		359.0	14.0	1.000041
52500.0	197.0	_(;e•0			179.9		356.5	12.8	
2.500.cc		-65.5			175-1		355.	11.3	
53500.0	_	~65•1			1/6.3		352.1	4.8	1.000038
54690.3		-64.6			165.8		お・ひまり	ช	1.000037
54500.0	30.06	-64.3			161.5		342.6	8.8	1.000036
C•000cc	G•hó	-63.9			157.3		328.0	2.0	1.000035
55500.0	36	-64.5			155.7	•	4.442	1.5	1.000034
\$+040ac	9) 2)	165.2			150.5	501.6	266.1	1.4	1.000034
50500		-66-1			147.5	500.6	257.1	1.1	1.000033
5.000.0	8	-66.9			オ・コカド		205.1	1.2	1.000032
57500.0	ప్	-67.3			141.2		153.3	#	1.000031
58cc0.0		167.2			137.6		143.8	11.5	
28300•0	79.3	-67.1			134.1		141.2	18.2	•
59000		-67.0			136.7		170.4	15.3	٠
3626G		5.99-			127.4		104.5	13.9	1.000028
900000		-66.7			124.1		2.90	13.0	•
<b>60200.</b>		-67.2			121-3		27.2	18.6	
51000.0		6.29-			118.7		12.2	26.4	
61500.0		-67.b			115.6		8.41	23.7	1.000026
62000+C		-67.2			112.6		17.9	21.1	
62500.0	9	6•99-			3.00.		21.7	16.4	1.000024
62000.0	63.3	2.60%			106.8	0.000	26.6	11.2	1.000024

3989.FO FEET MSL	1445 HRS MST	_
SIATION ALTITUDE 3989-00 FEET MSL	6 DEC - 38	ASCENSION NO. 507

GEODETIC COORDINATES 32.40043 LAT DEG 106.37033 LON DEG

TABLE 7 (CONT)

UPPLR AIR DATA 3409020567 WHITE SANUS

1.000021 1.000021 1.000020 1.000023 1.00000-1 1.000011 -000022 020000-1 -000019 .000019 -000018 ·000017 -000017 .000016 •000016 -000015 .000014 .000013 .000012 .000012 .000012 •n00015 .000014 .00001 -000013 ·000013 **KEFKACTION** SPEED KNOTS WIND DATA DIRECTION DEGREES(TN) 34.0 23.7 15.5 11.5 6.9 354.3 341.6 318.1 287.6 256.7 225.1 193.2 190.9 189.0 194.0 214.1 217.7 227.1 245.4 210.4 SPECU OF 560.9 502.3 502.8 503.2 564.1 504.0 553.8 563.6 563.3 503.9 566.4.3 566.4.4 566.4.4 568.4.4 568.8 574.2 5.09 551.8 SOUNA RIVOTS 6.95 70.6 65.1 0.20 0.16 85.3 82.0 78.2 72.6 55.3 52.5 83.7 70.3 74.5 53.3 60.09 58.3 56.8 REL.HUM. LENSITY
PERCENT GMZCUHIC
METER 104.0 Et.1 80.1 AIR DENPOINT MILLIBARS DESKEES CENTISRADE TEMPERATURE -61.7 -61.1 -50.5 -57.9 -65.8 -65.5 -65.2 -64.5 -53.8 -63.5 -53.4 -63.6 -64.0 -63.0 -62.4 -59.2 -56.6 -56.3 -63.9 -59.B -58.5 -64.1 PHESSURE 50.2 53.8 57.5 54.5 53.2 50.6 n.64 42.0 47.0 44.1 39.0 A . O . 42.4 36.7 36.8 35.4 35.4 34.8 35.4 32.b 31.4 04000-0 64509-0 69599•0 70000-0 71099-3 71509-0 72090-3 74580.0 75039.1 75509.0 07539.0 650VE 1840 0.4500.n 0.60000 6.600+0 £50000 655,00.0 30503·C 57000.0 72500.0 13000-0 7.5500.0 (4000+) 0.0059 77000-0 Genada, ALIATUDE MSL FEET

STATION ALTITUDE 3989.00 FEET MSL 6 DEC: 79 1445 HRS MST ASCENSIO: NO: 507

MANDATONY LEVELS 340020507 WHITE SANCS TABLE 8

GEODETIC COONDINATES 32.40043 LAT DEG 106.37033 LON DEG

PHESSURE G	PRESSURE GEOPOTENTIAL	•	TEMPERATURE	REL .!10,10	WIND DATA	ATA
MILLIBARS	FLET	AIR DEGREES	DEAPOILII CENIIGHADE	PERCENT	DEGREES (TN)	SPEED
850.9	4765.	12.4	-10.5	19.	280.0	2.2
400.0	6420.	8.0	-12.2	22.	280.0	6.9
750.0	8152.	4.2	-14.3	24.		17.5
200-0	10003.	6.2	-14.5	<b>:1</b> :		24.5
650.0	11994.	3-1	-16.8	7,7	317.9	22.4
6-009	14007.	# · · ·	-19.5	7.5		21.0
550.0	16362.	5.4-	-27.6	14.	286.B	22.5
200.0	16796.	-10.6	-31.5	16.		13.0
G•0Cħ	21422.	-17.2	-36.6	, o.	342.9	13.3
0.00a	c+279.	-24.5	さ・スカー	17.	13.0	11.0
350.0	27415.	-33-1	7.6h-	18.		15.1
3000	30902	-42.2		Ì	10.6	23.1
250.0	34548.	-53.7	•		10.3	33.5
2002	39508.	-55.2				42.5
175.0	42297.	-56.7			21.8	42.1
150.0	+54A3•	-60.0				36.7
155.0	49203•	-61.3				21.9
100.0	53683.	-64.7				9.0
30.06	55134.	-67.1				15.7
70.07	60779.	6-29-				26.6
0•39	63835.	-65.8				9.3
0°08	9747G	-63.3			^	3.3
5°04	71991.	-61.4				10.4
30.05	17940.	<b>-52.</b>				

\*\* AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.